

Memorandum

To: MS4 Stormwater Committee

From: Ronald Madison, P.E.

Copy: Bradford Flynn, Bath Borough Manager
Lee Stinnett, MS4 Solicitor

Date: June 24, 2024

Subject: Bath Borough Stormwater Utility Fee Research
Preliminary GIS Database Impervious Area Analysis
Preliminary Financial Analysis

Project No.: BOB0004A

Colliers Engineering & Design (CED) researched surrounding Boroughs, Townships and Cities for Stormwater Utility Fee Information to assist Bath Borough in creating a stormwater Utility Fee system. The municipalities and/or authorities that were researched have established stormwater Utility Fee systems which breakdown costs per the amount of impervious coverage and provide opportunities to receive credit for stormwater BMPs installed on their property.

The following Boroughs, Cities and/or Township Authority research:

1. Fountain Hill Borough

- Stormwater Fee
 - Base Unit = 500 S.F. of Impervious Area (IA)
 - **Stormwater Fee = \$20/Base Unit/per year**
 - Base Units = Impervious/Base Unit
 - Total Fee = Base Units X \$20/Base Unit

2. Bethlehem Township

- Stormwater Fee – Base Unit is 1000 sf IA

Tier No.	Impervious Area	Monthly Fee	Annual Fee
Tier 0	Less than 300 sf	\$0	\$0
Tier 1	300-1299 sf	\$2.20	\$26.40
Tier 2	1300-4999 sf	\$8.60	\$103.20
Tier 3	5000+	\$2.79 per 1000 sf IA	Varies

3. Palmer Township

- Stormwater Fee – Base Unit is 1,000 sf IA

Tier No.	Impervious Area	Monthly Fee	Annual Fee
Tier 0	Less than 300 sf	\$0	\$0
Tier 1	300-1,999 sf	\$9.64	\$115.68
Tier 2	2,000-3,999 sf	\$20.00	\$240.00
Tier 3	4,000-5,999 sf	\$32.68	\$392.16
Tier 4	6,000+	Monthly Fee of \$6.94/1000 sf of IA. (Rounded to nearest 100 sf)	

4. City of Bethlehem

- Stormwater Fee
 - Billing Unit = Impervious Area / 2,101 sf
 - User Fee = Billing Unit x rate
 - **Stormwater Utility Fee = \$60/year**

5. City of Allentown

- Stormwater Fee
 - Billing Unit= Total Impervious/500 sf
 - User Fee = Billing Unit x \$20/Quarter
 - **Stormwater Utility Fee = \$80.00/year**
- Credits and Appeals

6. City of Easton

- Stormwater Fee
 - Single Family Residential Parcel (SFR) shall be charged for one ERU at a billing rate of \$6.75.
 - For a Non-Single-Family Residential Parcel (NSFR) the fee is calculated as follows:
 - Equivalent Residential Unit (ERU) = Total Impervious / Billing Unit (1,797 sf) (One ERU)
 - NSFR Fee (Monthly) = #EUR x \$6.75 (EUR Rate)
 - **Stormwater Utility Fee - \$81.00/year**

Borough of Bath MS4 Cost Summary (Preliminary Estimates)

	2024	2025	2026	2027	2028
DPW Staff Labor and Billing Staff Labor/Software	\$30,000	\$40,000	\$42,000	\$44,000	\$48,000
PADEP Permit Fees	\$1,000	\$1,000	\$1,000	\$10,000	\$1,000
Legal Fees	\$30,000	\$20,000	\$15,000	\$20,000	\$15,000
Engineering Services	\$45,000	\$30,000	\$15,000	\$25,000	\$15,000
MS4 PRP Engineering	\$80,000	\$40,000	\$10,000	-	-
Capital Project/Finance	\$0	\$60,000	\$115,000	\$115,000	\$115,000
TOTAL Estimated Cost	\$186,000	\$191,000	\$198,000	\$214,000	\$194,000

PADEP MS4 Pollution Reduction Plan (PRP) - 3 Projects total \$480,000 in 2022
 2025 Estimated Cost \$800,000
 10 year Loan at 7% = \$9,300/mo. = \$111,600 annually
 Goal to have Utility Fee generate approximately \$200,000 annually (initial target)

GIS Database Analysis

750 Total Single Family Residential Parcels (Approximately)
 20% sampling of Single Family Residential Parcels
 150 parcels sampled – Mean = 3,618 sf IA

- Total Estimated Impervious Area = 2,713,000 sf
- 1 of 150 parcels less than 300 SF IA (assumed vacant land)

Non-Single Family and Non- Residential Parcels
 109 parcels sampled – Mean = 19,231 sf IA

- Total Estimated Impervious Area = 2,096,000 sf
- 11 parcels less than 300 sf IA (assumed vacant land)

Estimated 4.8 Million Square Feet Imperious Area within Borough of Bath (Approximately).

Potential Bath Borough Stormwater Authority Fee Schedule

Example 1: Uniform Rate

Approximately 850 Tax Parcels

$\$200,000 / 850 \text{ Tax Parcels} = \$236 \text{ per year per parcel}$

Example 2: Target \$25/Quarter/Base Unit,

2,000 sf/parcel as base unit

$\$100/\text{year} \times 750 \text{ Residential Parcels} = \$75,000$

$2.1 \text{ MSF} / 2,000 \text{ sf} = 1048 \text{ Billing Units} \times \$100/\text{year} = \$104,800 \text{ per year}$

Total Revenue Amount \$179,000

Example 3: Tiered System

Tier 0 - Parcels with <300 sf Impervious Area \$0.00/yr

Tier 1 - 300 sf to 2000 sf at \$20/Quarter = \$80.00/yr

Tier 2 - 2001 sf to 4000 sf at \$25/Quarter = \$100.00/yr

Tier 3 - 4001+ sf at \$30/2000 sf Base Unit/Quarter = \$120/2000 sf Base Unit/year

Assume 20 residential parcels Tier 0

Tier 1- 125 residential parcels at \$20/Quarter = \$ 12,500

Tier 2 - 500 residential parcels at \$25/Quarter = \$ 50,000

Tier 3 - 105 residential parcels at \$30/Quarter = \$ 76,380

Tier 3 - 100 non-residential properties at \$30/Quarter/2,000 sf Base Unit = \$120,000

Total Revenue Amount \$182,500

For MS4 Committee discussion, more analysis pending discussion.